

Appendix E: Antagonist Plate-to-Plate Data Summary

Compounds Tested by XDS's LUMI CELL™ ER Recombinant Assay for Plate-to-Plate Variability

Antagonist Plate-to-Plate Data

<u>ICCVAM Recommended Compounds for Validation of ER TA Assays</u>		CAS RN	ICCVAM Historical Data				XDS's LUMI CELL™ ER Data for Validation of <i>In Vitro</i> ER TA Assay Antagonist Plate-to-Plate Data				
			RAB Range	MCRG Studies				Estradiol Positive at 10 µg/ml	Estradiol Positive at 1 µg/ml	<u>IC 50 mmol/ml ± Standard error</u>	Relative Induction to Tamoxifen
				ER Agonist	ER Antagonist	AR Agonist	AR Antagonist				
ER POSITIVE:											
Apigenin	520-36-5	P	+	+	-	-	-	Cell Toxicity	+	1.06E-04 ± 2.40E-05	4.42E-03
Bisphenol A	80-05-7	P	+	-	-	+	+	+	+	2.52E-04 ± 1.07E-05	1.86E-03
Coumesterol	479-13-0	P	+	+	-	-	+	+	+	N/A	N/A
Daidzein	486-66-8	P	+	-	-	-	+	+	+	N/A	N/A
p,p'-DDT	50-29-3	P	+	+	-	+	+	+	+	9.42E-05 ± 1.09E-06	4.99E-03
Dibenzo(a,h)anthracene	53-70-3	PP	+	+	+	-	Insoluble	+	+	N/A	N/A
Diethylstilbestrol	56-53-1	P	+	-	-	+	+	+	+	2.51E-05 ± 6.19E-06	1.88E-02
17alpha-Ethynodiol Estradiol	57-63-6	P	+	-	-	-	+	+	+	1.05E-04 ± 1.59E-05	4.47E-03
Flavone	525-82-6	PN	+	+	-	-	Cell Toxicity	+	+	1.49E-04 ± 1.97E-05	3.16E-03
Genistein	446-72-0	P	+	+	-	-	+	+	+	2.88E-04 ± 1.22E-05	1.63E-03
Tamoxifen	10540-29-1	P	+	+	-	-	-	-	-	4.70E-07 ± 3.18E-08	1.00E+00
Zearalenone	17924-92-4	P	+	+	-	-	+	+	+	3.13E-05 ± N/A	1.50E-02
ER NEGATIVE:											
Corticosterone	50-22-6	PN	-	-	-	-	Cell Toxicity	+	N/A	N/A	N/A
Medroxyprogesterone Acetate	71-58-9	PP	-	-	+	-	Cell Toxicity	+	N/A	N/A	N/A
Spironolactone	52-01-7	PP	-	-	+	+	+	-	N/A	N/A	N/A
Vinclozolin	50471-44-8	PP	-	-	-	+	-	-	N/A	N/A	N/A